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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,223	03/23/2004	Mark H. Miller	009554-0308963	1747
909	7590	08/06/2004	EXAMINER	
PILLSBURY WINTHROP, LLP			ROWAN, KURT C	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			3643	

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/806,223

Applicant(s)

MILLER ET AL.

Examiner

Kurt Rowan

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6-16-2004  
3-23-2004
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claim 73-74 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 73 does not further limit claim 72 since claim 71 and 72 both recite carbon dioxide. Claim 74 likewise does not further limit claim 73 since claim 72 recites the same limitations.

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-76 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-50 of U.S. Patent No. 6,286,249. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are obvious in view of

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the previously patented claims. Claims 1, 24, 39, 50, recite methods and devices for capturing insects having an insect trap with an airflow generator for generating an outflow and an inflow both connected to respective outflow opening and an inlet opening. Claims 1, 10, 48, 49 of the '249 patent recite an insect trap having flow mechanism which corresponds to the airflow generator. The '249 patent also recites an outflow channel which corresponds to the outflow opening recited in claim 1 of the present application. The '249 patent recites an inflow directed through an inflow channel which corresponds to the inlet opening. Claims 48 and 49 of the '249 patent state that the inflow is directed to the flow near an upper edge of the outflow outside of the trap and that the outflow is directed towards the ground which corresponds to the limitation that the inlet opening is positioned vertically higher than the outlet opening since then a lower edge of the tube would inherently be below the inlet opening. Claim 10 of the '249 patent recites that the inflow is substantially counter to the outflow of the device. Hence the claims of the present invention are obvious over the claims of the '249 patent since the same elements are recited.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 17-18, 24-27, 28, 30, 39-43, 45, 50-53, 55-58, 66-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheshire.

The patent to Cheshire shows an insect trap in Figs. 1-4 having a fan that generates air in an outflow using motion and heat to attract insects that flows outwardly from the device to create a plume flowing downwardly and spreading in the radial direction from the device. Cheshire shows an inflow substantially counter to and immediately adjacent an upper portion of the plume and then into the trap such that insects are attracted to the outflow and flying along the upper portion of the plume towards the trap will intersect the inflow and be drawn into the inflow as discussed in column 2, lines 28-68 and column 8, lines 43-55.

Cheshire shows a fan 19 with motor 25 that generates both the inflow and the outflow. Cheshire shows a cover member 11-13. Fig. 4 of Cheshire shows insects being sucked into the trap. Column 9, lines 47-49 recite that the exhaust flow from the trap contributes to the upward flight reflex to entrap insects such as mosquitoes in the inflow. Since both the motor that operates the fan and the light are in the outflow, heat from these elements is moved by convection currents functions as an attractant. The light acts as an attractant without the airflow, but heat from the light and the fan motor add to the effect in conjunction with the airflow. In reference to claim 28, Cheshire shows a cover 11, 12, 13 so that the edge portion of the cover is spaced from tubular member 15 to define an inlet opening as shown in Fig. 4.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-11, 19-20, 21, 29, 44, 54, 59-60, 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire.

The patent to Cheshire shows an insect trap as discussed above. Cheshire discloses the use of a collection bag in column 4, lines 31-32 which would appear to be mounted on the outside of the lower portion of the housing 15 which can be considered as a tubular member. In reference to claim 9, Cheshire does not disclose mounting an insect trap on the inside of the tubular member, but it would have been obvious to mount the trap on the inside member since the function is the same and not stated problem is solved noting that the rearrangement of part is deemed to be an obvious matter of design choice. See *In re Japikse*, 86 USPQ 70. In reference to claim 19, Cheshire shows a single fan, but it would have been obvious to employ more than one fan for multiplied effect. See *In re Harza*, In reference to claim 20, Cheshire shows one fan for generating both the inflow and the outflow, but given that it would have been obvious to employ two fan for multiplied effect, it would have further been obvious to employ one fan in the inflow and one fan in the outflow to tailor the fan speeds to each flow to optimize them to catch the most insects. In reference to claim 21, Cheshire

discloses a catch bag in column 4, lines 31-33, but does not disclose if the bag is flexible mesh. However, it would have been obvious to employ flexible mesh to catch the insects and let the outflow pass through the bag. The examiner takes Official notice that flexible mesh structures are old and well known in the art to catch insects.

7. Claims 12-16, 22-23, 31-38, 46-49, 61-65, and 71-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire as applied to claims 1-11 above, and further in view of Waters.

The patents to Cheshire and Waters show insect traps. Cheshire does not show a carbon dioxide attractant. The patent to Waters shows a carbon dioxide insect attractant noting Fig. 1 and lines 1-12 in column 3. The carbon dioxide attractant flows into trap 11 by connecting tube 14 from reaction chamber 12. In reference to claims 12, 31, 35, it would have been obvious to provide Cheshire with a carbon dioxide attractant as shown by Waters to attract more insects to the trap. In reference to claims 32, 33, 34, the proposed combination does not disclose where the carbon dioxide is supplied in relation to the fan. However, it would have been obvious to supply carbon dioxide to a point above the fan to more effectively disperse the carbon dioxide to an area surrounding the trap to attract more insects. In reference to claim 36, 37, Waters does not disclose a tank but a reaction chamber. However, it would have been obvious to employ a tank to hold the carbon dioxide as opposed to generating the carbon dioxide in a reaction chamber since the function is the same and no stated problem is solved.

The examiner takes Official Notice that carbon dioxide tanks are well known in the art relating to the trapping of flying insects.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kurt Rowan whose telephone number is 703 308-2321. The examiner can normally be reached on Monday-Thursday 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 703 308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kurt Rowan  
Primary Examiner  
Art Unit 3643

KR